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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,487	01/09/2004	Larry W. Gatlin	03015/03UTL	6181

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EXAMINER

BOYER, RANDY

ART UNIT	PAPER NUMBER
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1797

MAIL DATE	DELIVERY MODE
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11/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/754,487

Applicant(s)

GATLIN, LARRY W.

Examiner

Randy Boyer

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e); was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office Action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12 October 2007 has been entered.

Response to Amendment

2. Examiner acknowledges Applicant's response filed 12 October 2007 containing amendments to the claims and remarks.
3. Claims 1-35 are pending.
4. The previous rejections of claims 2 and 19 under 35 U.S.C. 112, first paragraph are withdrawn in view of Applicant's arguments and amendment to the claims.
5. The previous rejections of claims 1-27 under 35 U.S.C. 102(b) and/or 35 U.S.C. 103(a) are withdrawn in view of Applicant's arguments.
6. The previous rejections of claims 28-35 under 35 U.S.C. 102(b) are maintained.
7. New grounds for rejection of claims 1-27 under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) are entered in view of newly discovered prior art. The rejections follow.

Claim Rejections - 35 USC § 102 / 35 USC § 103

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-27 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yon-Hin (EP 0882778 A2).

11. With respect to claims 1 and 18, Yon-Hin discloses contacting a fluid including noxious sulfur-containing species with an effective amount of a sulfur scavenging composition comprising substantially monomeric aldehyde-amine adducts formed from a reaction of a molar excess of an aldehyde or aldehyde donor and a secondary amine having at least one sterically bulk substituent (see Yon-Hin, page 4, Example 1).

12. With respect to claims 2-6, 19, and 23-26, Yon-Hin discloses the use of aldehyde and amine species to produce a sulfur scavenging composition (see Yon-Hin, page 4, Example 1; page 3, lines 12-58; and page 4, lines 1-8).

13. With respect to claims 7 and 27, Yon-Hin discloses wherein the composition comprises a solution including a quantity of adducts and the remainder a solvent (see Yon-Hin, page 4, Example 1).

14. With respect to claims 8-17, Yon-Hin discloses wherein the fluid is *any* hydrocarbon stream (see Yon-Hin, Abstract; page 2, lines 3-5; and page 4, lines 9-13).

15. With respect to claims 20-22, Yon-Hin discloses wherein the adding step may be continuous, intermittent, or periodic (see Yon-Hin, page 4, lines 13-16; and Example 4).

16. Claims 28-35 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Weers (EP 0475641 A1).

17. With respect to claims 28 and 29, Weers provides an inherent disclosure for contacting a sulfur scavenging composition *in a container*. Weers does not explicitly disclose use of a "container." Nevertheless, the person having ordinary skill in the art would recognize from Weers' disclosure that use of some sort of container is necessary to hold the sulfur-containing hydrocarbon to be treated by the sulfur scavenging composition. Likewise, the person having ordinary skill in the art would recognize that the sulfur scavenging composition could be added (or "contacted") with the hydrocarbon either prior to, after, or at the same time as adding the hydrocarbon to the "container."

18. With respect to claim 30, Weers discloses a sulfur scavenging composition comprising a solution including from about 5 wt.% to about 50 wt.% of the adducts, the remainder being a solvent (see Weers, page 5, lines 57-58).

19. With respect to claim 31, Weers discloses contacting a sulfur scavenging composition with a hydrocarbon containing hydrogen sulfide (see Weers, page 5, lines 53-54).

20. With respect to claims 32-34, Weers provides an inherent disclosure for introduction of a sulfur scavenging composition via a chemical tool, coiled tubing, or capillary coiled tubing (CCT). Weers does not provide an explicit disclosure for the means by which the sulfur scavenging composition is added to the sulfur-containing hydrocarbon to be treated. Nevertheless, the person having ordinary skill in the art would recognize that any suitable means could be used, be it by pouring (i.e. "batch introducing step"), by pumping the composition through a pipe, or other "chemical tool," "coiled tubing," or "capillary coiled tubing (CCT)."

21. With respect to claim 35, Weers discloses a sulfur scavenging composition comprising a solution including from about 5 wt.% to about 50 wt.% of the adducts, the remainder being a solvent (see Weers, page 5, lines 57-58).

Response to Arguments

22. Applicant's arguments filed 12 October 2007 have been fully considered but they are not persuasive.

23. Examiner notes that Applicant's arguments with respect to claims 1-27 are moot in view of the new grounds of rejection.

24. With respect to claims 28-35, Examiner understands Applicant's principal argument to be:

- I. The method of claims 28-35 is novel and non-obvious over Weers (EP 0475641 A1) because the compositions (as claimed by Applicant) are novel and non-obvious over Weers.
- II. The CAFC has made it clear that a method practiced with a patentable composition is per se patentable.

25. With respect to Applicant's first argument, Examiner notes that independent claims 28 and 31 do not incorporate all the limitations of independent claims 1 and/or 18. Specifically, Examiner notes that claims 1 and 18 as currently amended specify the reaction of an "aldehyde or aldehyde donor" and a "secondary amine" (emphasis added). In contrast, claims 28 and 31 merely specify the reaction of an "aldehyde or aldehyde donor" and "at least one amine." Thus, claims 28 and 31 do not require the amine to be a secondary amine. In this regard, Examiner notes that Weers discloses the use of secondary amines (see Weers, page 4, lines 21-22). Therefore, Applicant's argument is unpersuasive because the patentability of neither the composition nor the method for using the composition has been established.

26. With respect to Applicant's second argument, the argument is moot because patentability of neither the composition nor the method for using the composition has been established. Moreover, Applicant does not cite any Federal Circuit case law to support such an argument.

Conclusion

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Boyer whose telephone number is (571) 272-

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7113. The examiner can normally be reached Monday through Friday from 8:00 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola, can be reached at (571) 272-1444. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RPB



Glenn Caldarola
Supervisory Patent Examiner
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